

(10) ABSTRACT OF THE DISCLOSURE

Reproducing sepia tone images. The image is scanned using conventional RGB light and added infrared wavelengths. Using L*a*b* color coordinate system, “L”-channel values are determined by the infrared channel only, and “a” and “b” channels are filled with respective benchmark values that represents the yellow-brown sepia background tone of the original. This new L*a*b* data is converted to appropriate output device color space.

Figure 6. The effect of the number of iterations on the accuracy of the proposed algorithm. The results are shown for different values of α and β . The x-axis represents the number of iterations (from 0 to 100), and the y-axis represents the accuracy (from 0.8 to 1.0). The legend indicates four cases: $(\alpha=0.9, \beta=0.9)$, $(\alpha=0.9, \beta=0.7)$, $(\alpha=0.7, \beta=0.9)$, and $(\alpha=0.7, \beta=0.7)$.